

House Select Committee on North Carolina River Quality
Thursday, November 30, 2017 at 9:30am
Room 643 LOB

MINUTES

The House Select Committee on North Carolina River Quality met at 9:30 AM on Thursday, November 30, 2017 in Room 643. Representatives Davis, Grange, Iler, Dixon, Floyd, Hall, Harrison, McElraft, Muller, Steinburg, Stone, and Yarborough attended. The list of visitors is **Attachment 1**.

Representative Ted Davis, Jr., Senior Chair, presided.

He began by introducing the Sergeants at Arms, Jonas Cherry, Rey Cooke, Reggie Sills, and Dean Marshbourne. He thanked them for what they do for the legislature.

Chairman Davis then welcomed Representatives Bob Muller and Elmer Floyd to the Committee. He publicly thanked Speaker Tim Moore for appointing these members because they both represent areas within the Cape Fear Region and he feels they have a place at the table.

He then recognized his Co-Chairs for comments. Representative Grange said they had another ambitious agenda today and felt like they could discern from their previous meetings that this is a very complex issue. She said there was still some fact finding to do but looks forward to formulating legislative solutions for this issue. Representative Iler had no comments.

Chairman Davis said that there was a Department of Environmental Quality (DEQ) update which includes certain things that are on the agenda before the Committee, see **Attachment 2**. He recognized the speakers from DEQ; Sheila Holman, Assistant Secretary for Environment; Linda Culpepper, Deputy Director, Division of Water Resources (DWR); Michael Scott, Director, Division of Waste Management (DWM); and Mike Abraczinskas, Director, Division of Air Quality (DAQ). Chairman Davis said the Committee looked forward to hearing their presentations.

Sheila Holman was recognized to present first. She informed the committee she had also 3 other staff members with her to help with questions. She would be working through various topics providing general updates and also following up on several questions that were asked at the end of the last meeting. Ms. Holman said she would be providing information where they are monitoring for surface water, where they are monitoring for ground water, enforcement actions and any other general updates.

Ms. Holman began with DWR. She would focus on Surface Water Quality, DWM, who is working on ground water contamination, and finally DAQ. Within DWR, there were several questions last time about National Pollutant Discharge Elimination System (NPDES). See **Attachment 3, page 15, the correct number should be 64 not 96 as it shows on the attachment**. She covers this again to help to help the Committee understand the different parts of the permitting program and to help them understand the Department's duties look at various water flows.

Ms. Holman discussed the permit backlog history, see **page 16, Attachment 3**, over the time period from January 2008 through July 2017. In 2008, 10-15%, the backlog at any given time has increased over time and the NPDES permits are operating under expired permits.

The next slide showed a little more detail in terms of staffing and resources. It has been steady at 14 to 14 ½ full time employees (FTE) from the 2008 period. In 2012 there was a decrease to 11 FTEs; in 2013 there were 9 ½ FTEs. In addition, they had a network clone training on tax certifications added to this staff's duties. Another factor contributing to the backlog in 2016-2017 was a directive to focus on the necessary NPDES permits for the coal ash managements. She hoped this explained some of the reasons for the backlog and questions about the staffing over time. She also, how the nine FTEs in NPDES were funded—four were funded with receipts and five were funded with federal grants. There are no appropriations going to those particular positions. On **page 18, Attachment 3**, she gave a quick update of the total number of Water Resources staff who are working at least part time on GenX and emerging compounds issues. This also breaks down how the different people are funded.

On **page 19, Attachment 3**, Ms. Holman talked briefly of the ongoing sampling that is being done by the DEQ staff from the June time period, roughly June 19; they were sampling weekly at the Chemours outfall until August. In early August, they started sampling daily through the work week. Most recently, they are using a composite sampling device that collects a sample of wastewater every couple of hours. It could sit in a collection vessel and from that vessel they take a sample twice a week and so they have a more comprehensive look at waste stream over time. It saves not only staff resources but it also gives them a better overall picture of what's being discharged throughout the whole work cycle and they are not missing Saturdays and Sundays with this approach.

Staff prepare the sample containers, they pack them in ice, travel to the site, they inspect the composite sampling equipment to make sure it's operating correctly. They take the sample and complete the chain of custody report prior to shipping the sample containers to the lab. Drinking water samples at the downstream drinking water systems are collected weekly. Again, the staff prepare the sample containers at their regional offices and then go out and collect the samples and complete the tracking papers, then ship the containers to the lab each time. Once they get the results back from the labs, the water sciences section goes through those lab results and does a quality assurance review of the lab reports and then moves to post the data on the website.

Ms. Holman then spoke about the data at the Chemours outfall. This shows various compounds that are being monitored, see **page 20, Attachment 3**. The purple one with the spike is GenX. The date here is coming from the spill that occurred on October 6. They became aware of the spill on November 1. They sent some sample data to the United States Environmental Protection Agency (U.S. EPA) lab and they called to let them know that there had been an unusual spike in GenX of the outfall at Chemours and that they wanted to rerun the lab sample to make sure that there was, in fact, a spike.

They reached out to the company because they knew they were also sampling on a daily basis and asked if they had any data from that time period. They shared their data and at that time indicated there had been a spill. Ms. Holman shared the data of the concentrations they were aware of from Chemours. It showed the discharge outfall increasing to 250 parts/trillion on October 6, peaking at 3,700 parts/trillion on October 9, and then dropped back to 740 parts/trillion on October 12 and down to 380 parts/trillion on October 16. Prior to the spill, the water samples on October 2 and October 5 were 35 and 69 parts/trillion, respectively.

On October 9, concentration of GenX at Bladen Water Facility was 253 parts/trillion, well above the State goal. Also, the NW Brunswick Drinking Water Facility had a GenX level of 250 parts/trillion on October 19. They think, certainly, the spill impacted the Bladen Bluffs finished water sample. She was

not quite sure about the NW Brunswick given the timeframe between the spill and when the spike was observed. There are lots of different things that could lead to that spike in NW Brunswick, including lower river flow as well as some GenX being disturbed in the sediment and getting into the uptake. They again believe there was a correlation between this spill on October 6 and the high value in Bladen Bluffs. It also could be contributed to Brunswick spike on October 19. Then again they learned of the spill when Chemours shared their data with them on November 1.

Later on, Chemours reported to them that data from the water quality at the outfall showed concentrations of GenX at 2,400 parts/trillion for samples collected October 27 through 30 and 2 of the 90 parts/trillion on October 31 through November 2. They are awaiting test results to see whether or not there is an impact on downstream drinking water facilities. The company has indicated working with their internal lab. Their internal lab until recently could test down to the parts/billion level. They now have the ability to test down to 100 parts/trillion. To get more detailed data they are shipping to an off-site lab. Going forward they will be able to test in house at least down to 100 parts/trillion so the spikes should be able to be seen sooner from that information, should they occur.

The theory of this latest spike, October 27 through November 2, from the company's perspective is they were gearing back up from shut-down mode between, roughly, October 17 through 26 and the wastewater treatment system 6 million gallons/day; typical 22 million gallons/day. They believe that part of the spike was due to that low flow, obviously with a much slower volume of water you get a much higher spike. They also believe a couple of rain events may have contributed. There may have been some residual from the October 6 spill that got caught up in the stormwater and made its way to the wastewater discharge.

They are in the process of evaluating their stormwater system and they will be sampling at nine different points and will be providing information to the agencies shortly. When they learned of the spill of October 6, they had staff at the site on November 3. Ms. Holman showed a picture of the general area where the spill occurred. The rain event may have sent GenX into a culvert area which led to the waste water stream.

As DEQ continued to evaluate the situation, the Agency did decide on November 13 to issue a Notice of Violation (NOV) with intent to access a civil penalty related to the spill on October 6. Later that week, they determined what they believe to be partial suspension of the permit was necessary and they did a 60 day notice of intent to partially revoke the NPDES permit. Specifically, they are talking about the company's manufacturing process, wastewater streams, and prohibiting the Company from delivering to those to wastewater treatment systems. Ms. Holman said a letter had been sent asking them to comply with this by today, November 30. They received a response per a letter just last night that said they intend to do so. There is staff on site today verifying that they are doing that.

Ms. Holman advised the Committee that the next step in the NPDES permit (with a proposed new permit), would not include the manufacturing wastewater discharge as part of the permit. That would go to public comment and that will take a few months to complete.

Chairman Davis had two questions for Ms. Holman. The first was does Chemours give DEQ any justification for why they did not timely report that discharge like it's supposed to?

Ms. Holman answered that she does not believe they have received any clear explanation of why it was not reported.

Chairman Davis then asked is that why DEQ is proceeding with the permit violation?

Ms. Holman responded that the permit violation would have happened anyway.

Chairman Davis asked would there be any action by DEQ against Chemours because they did not report the discharge like they should have?

Yes, there will be a civil penalty assessed per Ms. Holman.

Chairman Davis asked if she knew when.

Ms. Holman said it should be a couple of weeks. She then recognized Linda Culpepper, Interim Director of DWR. Ms. Culpepper said they had received a response this past week and are still going through it. She agrees with Ms. Holman that it's probably not complete and they will have additional questions. She thinks it may be a difference of thought of whether it is required to be reported and that's exactly what they will continue to evaluate.

Chairman Davis asked if the latest spill, the October 6 discharge, was a violation of the partial consent order that was done in Bladen County? He knows they are pursuing a permit violation, is there any way to justify DEQ pursuing a partial consent order?

Ms. Holman says they have looked carefully at the consent order. They have talked with attorneys at DEQ and the Attorney General's Office and the intent of the language in the consent order was to address normal operating conditions. The spill is not normal. They believe it is difficult to determine if there has been a violation of the consent order.

Chairman Davis then recognized Representative Steinburg. Representative Steinburg said that a notice of violation is because of a consent order is not necessary because of previous approved permits. His understanding is that GenX is an unregulated contaminant, which if they had discharged the 700 parts/trillion under normal process that would not normally be a violation of the permit because it is an unregulated contaminant. There is no limit to how much they can discharge, so if they were discharging directly and didn't intend to do, would it be a violation?

Ms. Holman answered that she believes it is a violation of permit, not consent order. She believes that a violation of reporting requirements in the permit for upset events that lead to discharges to pollution into the environment.

Representative Steinburg asked if the discharge of any unregulated contaminants, whether GenX or anything else, would it be a violation, even though it's not explicitly stated or has discharge limits in the permits?

Ms. Holman answered there are specific reporting requirements when events like this occur. It's not specific to regular pollutants.

Representative Steinburg then asked if new permits would not allow the discharge, is it just GenX or any industrial waste water?

Ms. Holman said the intent right now is to propose not to discharge any process wastewater.

Representative Steinburg asked if she was suggesting that Chemours cannot discharge any industrial wastewater through their permit, which is the other two manufacturers on site as well?

Ms. Holman said that is not correct. What they suggest is that wastewater coming from the manufacturing process at Chemours should be diverted. They can still process the boiler blowdown, cooling water, sanitary wastewater--all of which goes through the wastewater treatment system, along with the manufacturing process wastewater from both DuPont and Kuraray.

Chairman Davis asked for clarification, if it is deemed to be a pollutant, you cannot put in the water but if it is a non-pollutant, then you can put in water?

Ms. Holman answered that she thinks there is a general concern on the part of the Agency about the various compounds coming from the manufacturing process system.

Chairman Davis commented that speaking from New Hanover County, how many times is Chemours going to be allowed to do this before the hammer is brought down? It is a great concern from where he lives.

Representative Grange was then recognized. She asked with the Nafion standards set by the U.S. EPA in an office in Georgia, how is this going to affect all of this here?

Ms. Holman said that action was taken in terms of partial suspension and that was done to inform Chemours that their manufacturing process wastewater whether from the Nafion manufacturing is in the area. All of that needs to be collected and disposed of differently than going through the wastewater treatment system. That takes effect today so in terms of the message to citizens worried about continued wastewater discharge, DEQ believes they have taken appropriate actions. Regarding the question on Nafion by-products, they learned as an agency that the U.S. EPA had done some non-targeted analysis and identified Nafion by-product as two other compounds that were in the discharge from Chemours. At that time, while they knew the chemicals were there, they could not verify the concentrations because there was no lab test standard to be able to accurately quantify that. DEQ has been working with the U.S. EPA and Chemours has been participating. They have offered pure samples of the products and are very close to being able to analyze for the Nafion by-products.

Representative Iler was recognized for clarification. He asked if plants were monitoring on a weekly basis, at the October 6 spill at NW Brunswick. Did he understand Ms. Holman to say that they did not know the impact on the treatment plants?

Ms. Holman responded there was a good correlation of the October 6 spill and the spike at the Bladen Bluffs treatment plant. The later spike at NW Brunswick treatment plant was later in time, she thinks the spill probably did have some influence and some other contributing factors to spike at NW Brunswick plant.

Representative Iler commented that he hears a lot from his area that this dumping might have been intentional? He asked if there was any evidence of that or possible criminal activity?

Ms. Holman responded that they have referred this to the State Bureau of Investigation to explore.

Representative Iler asked if she said that all wastewater containing chemicals at Chemours is supposed to be diverted at this point?

Ms. Holman said that was correct. Their manufacturing process, any wastewater coming from their different manufacturing processes needs to be contained and disposed of differently than going through the wastewater treatment system.

Representative Iler asked if that was effective today?

Ms. Holman answered that was correct.

Staff from the Fayetteville office was onsite today to verify that.

Representative Iler thanked her for her answers.

Chairman Davis recognized Representative Dixon. Representative Dixon questioned about the start back-up process and decrease in volume. He believed he understood Ms. Holman to say that was at least a portion of Chemours possible explanation of the spike. He asked if she would repeat the figures of what a normal flow is and what the start-up flow is?

Ms. Holman said the samples they saw were composite samples of October 27 through October 30. Over that timeframe, the average flow through the wastewater treatment plant was about six million gallons per day. She said she believe it started at two million and went up to eight million, but on average it was six million over the three days. The normal flow is about 22 million gallons per day.

Representative Dixon asked if there is a legitimate parallel here that the intensity of the spike was directly proportional to decrease in release volume?

Ms. Holman answered that they normalized for that and with that normalization, they showed under normal flows that the value would have been around 650 parts/trillion. So, it was due, in part, to the lower flow but when they tried to normalize based on what the concentrations might have been under a 2,200 million gallon flow, she thinks the value they estimated was 650 parts/trillion.

Representative Dixon said in the whole attempt at permitting what is being done to protect the waters is taking harmful stuff and diluting it with volumes of water to a level where it is not harmful. Is that applicable to the process over there?

Ms. Holman said certainly as they consider the permit, they look at what the concentrations would be in typical flows, high flows, etc. That is part of the process, but also understanding the receiving waters if they're already impaired, so there's a lot of things that get factored in but that is correct about the dilution aspect.

Representative Dixon then said that there is this company here that is producing something that's real bad and that "we automatically know is harmful to our health and we say to them, 'if you dilute it enough, we'll let you put it in the water anyway.'" He asked if this was correct.

Ms. Holman answered there is an evaluation to determine what is a safe concentration level to discharge into the receiving stream.

Representative Dixon addressed the chairman saying “maybe we need a paradigm change in the way we’re looking at this stuff. Why aren’t we more intense with our efforts to find out this bad stuff and not let it be discharged in any amount. There are technologies out there that are available that can take the bad stuff out and treat it in a whole different way than we’re doing. I think we’re going to see across the nation, the state, and everywhere, that this idea of diluting to solve dilution has reached its time, it’s no longer going to work.”

Chairman Davis commented that this is something this Committee can discuss when looking at long term solutions.

Representative Dixon said that he would like to look at the public record of the discussions that took place during the time of the original permitting process for Chemours. He asked if the Committee had done that yet?

Ms. Holman answered no and Chairman Davis said he was not aware of that.

Representative Dixon said there is a lot of misinformation that need to be corrected.

Chairman Davis said to get him any specific information and he will request the proper person(s) to get the corrected information on behalf of the Committee.

Representative Floyd was recognized next. Representative Floyd asked how did the Chemours Fayetteville Works Facility get its name in Fayetteville?

Ms. Holman responded that it was most likely DuPont’s name for it years ago but she will check on that.

Representative Floyd’s stated that this was his first meeting and he was clarifying they thought they should report before it came in.

Ms. Holman agreed with Representative Floyd and said that is why they issued the notice of violation for failure to report the incident that occurred on October 6.

Representative Floyd then asked for clarification on staff, **page 18, Attachment 3**, that Ms. Holman had stated earlier. Which was correct?

Ms. Holman explained that at the last meeting it was asked about the number of staff that were specifically on NPDES permitting program. That would be the nine that she talked about and of those nine, four are receipt reported and five are federal reported. They obviously have many more employees. The slide shows that DWR staff currently working on the GenX issue and the full number of staff that are dedicated working to address this situation.

Representative Floyd asked about the drinking water facilities downstream on **page 19, Attachment 3**. He stated that DEQ had her own separate report about the effects, is it possible that the Committee might get a copy?

Ms. Holman responded she would share that with them.

Representative Floyd commented that any meetings held in Cumberland County with the City officials, please notify the Committee, in case they would like to attend.

Chairman Davis commented he was glad the Speaker had appointed Representative Floyd to the Committee for Cumberland because he definitely has a place at the table for this issue. He then recognized Representative McElraft.

Representative McElraft said of the 22 million gallons permitted to go into the river, what percent was from the manufacturing will now be stopped?

Julie Grant, NPDES, DWR, was recognized to respond. She said that out of the 22 million gallons, it would be 1 million gallons, which was less than 5%.

Representative McElraft asked how often the one million gallons was stopped?

Ms. Grant responded that it was a daily volume, both 22 and 1 million gallons.

Representative McElraft asked if they had any idea what they will do with the one million gallons now?

Ms. Holman said they have been collecting a portion of the manufacturing waste streams since, roughly, June 21. Initially, they were bringing tanker trucks in and those were moved to Arkansas to be incinerated. Recently, they were notified they are being changed to railcar and shipping wastewater to Texas, she believes for deep well injection.

Representative McElraft said that she understood and is pretty sure this contaminant is a carcinogen. She feels they have to be careful when they talk about all of the discharges because as long as they know what is going into the water, the dilution process is probably the only way to cost effectively do manufacturing in the US and it is not just North Carolina. Drinking water is one of the most important things we have so we should not be putting things that we know are unsafe in the water, but we know there are a lot of discharges that are diluted and are safe once they get into the drinking water. Is there any filtration system that would take these molecules out?

Ms. Holman answered that the company is actively looking at a variety of alternative solutions. She stated she could not speak in detail to those yet.

Representative Yarborough was then recognized. He asked if he understood correctly that most of the testing to be done is only accurate to 100 parts/trillion.

Ms. Holman answered no. She said that the labs that have been used, whether it is Test America, which Chemours has used; the Agency has used SGS in Wilmington, NC and Gel Labs in Charleston, SC. Those labs, as well as the U.S. EPA labs at the Office of Research and Development and now the U.S. EPA lab in Athens, GA, can get detections down to below 10 parts/trillion. The company also has an on-site lab that they can detect GenX down to 100 parts/trillion.

Representative Harrison was recognized next. She thanked Ms. Holman for the presentation. She then referred to the chart with chemical concentrations that they have been testing with the GenX spike. She

understands there were other chemicals of concern and does not know if they are necessarily associated with the Chemours plant, but thought she remembered Dr. Detlef Knappe's study referencing perfluoro-2-methoxyacetic acid (PFMOAA) and other chemicals of concern. This water quality monitoring is specific to Chemours. Aren't there other contaminants associated with that plant that are of a health concern?

Ms. Holman responded there are other contaminants. From most of their testing going forward, they are going to be using what is called U.S. EPA method 537, which determines selected perfluorinated alkyl acids in drinking water by solid phase extraction and liquid chromatography/tandem mass spectrometry. She believes that it tests for approximately 24 per- and polyfluoroalkyl substances (PFAS) compounds, that include perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), GenX, and many other chemicals, which have health advisories set. Many of those other compounds have no health advisory, no water quality standards, and no health goals set. Their focus has been on the compounds that do health advisories or health goals. Working with U.S. EPA and the Secretary's Science Advisory Board to look at the prioritization of those other compounds to determine which of those we need to invest significant resources to better understand those potential health effects.

Representative Harrison asked if they are doing these types of testing around the State.

Ms. Holman said they are looking at how to use ambient monitoring around the State and how to take additional samples and have those tested. To characterize what's in the water across the State and then help with prioritizing how to move forward on the various emerging compounds.

Representative Harrison then asked about NPDES permitting, referring to land application standards, there was a sludge issue because that contains a number of the problematic contaminants. Is that part of NPDES permitting or separate permitting process?

Julie Grant responded that it takes a separate process that is done by their non-discharge group but it is all under the water quality permitting section that is separate from NPDES.

Representative Harrison asked if we are able to determine by analyzing which of these emerging contaminants are contained in the sludge?

Linda Culpepper responded they do not have any data as of yet. It would be a process to go and test the sludge for potential emerging contaminants.

Representative Harrison confirmed she was talking about sludge that is land applied.

Ms. Grant replied yes.

Ms. Culpepper added they had just talked with their folks who do land application permits and they have tentative plans in place to look at the biosolids and that kind of monitoring.

Chairman Davis recognized Ms. Holman to present the next part of her presentation, DWM. She begins with **page 24, Attachment 3**. She talked about the work that is ongoing within DWM. It has been primarily focused on evaluating the groundwater not only at the site but looking at drinking water wells in the neighboring communities. Phase 1 has been completed. Phase 1 was about 1-1/2 miles from the center of the processing plant, **page 25, Attachment 3**. Phase 2 is covering the initial boundary in phase

1 out to a mile from the property boundary. The Chemours facility owns about 2200 acres. The Agency has data back from 107 wells and they are still seeing data come in. Of the data received, they have 34 wells about the health goals and the highest level detected is 1,200 parts/trillion. Because of this, the Agency does not think they have explored the full universe of the potentially affected private wells so they are in discussion on what phase 3 will look like.

She then explained the maps, see **Attachment 4**. She showed the Committee the maps and explained why they are proposing to go north of the facility as well as south and west of the facility. If a private well is found to be above the health goal, bottled water is provided and they are still working with both Cumberland and Bladen Counties and Chemours on the long term solutions. She explained about additional DEQ sampling and the ongoing work by the company. They are sampling 40 additional monitoring wells on the property as well as conducting some shallow and vertical soil profiling of GenX. The Agency is trying to understand the extent of the groundwater and soil contamination.

Chairman Davis asked for questions from the Committee. Representative McElraft was recognized and asked if there was any possibility these tests are picking up other things and if so, how accurate?

Ms. Holman answered that this is a man-made chemical so it should not be occurring naturally but DEQ should probably look further and test the theory.

Representative Harrison was recognized. She asked who was paying for the bottled water that is being provided to the residents with contaminated water.

Ms. Holman responded that Chemours was.

There was no further questions and Chairman Davis recognized Ms. Holman for the next part of the presentation, DAQ. She began with the staff working on GenX, see **page 34, Attachment 3**. Next, she talked about the Chemours air emissions. She said she had spoken last time about the fate of these emissions and what impact they might have on the environment. These are all estimates from a computational model that is based on massed balance principles. They need wind data and air dispersion modeling as they contemplate the role of air emissions. They started with calculating a Wind Rose, see **page 37, Attachment 3**. Basically, it shows a typical wind direction in the area from 19 years of data from Fayetteville Regional Airport. It shows two predominant wind directions from the southwest and the northeast. With this information, they have hypothesized that winds that frequently blow from these directions would impact air emissions to the northeast and to the southeast of the facility. As they contemplate how some of the private wells were contaminated, one of the theories is that atmospheric deposition may be playing a role.

The staff within Air Quality have worked to do some preliminary deposition modeling, using the emissions provided by the company, such as evenly hourly distributed emissions being released--they're emitting at the same hourly rate, 365 days per year. The meteorological data was taken from over five years from 2012 through 2016. They match that with the emissions and actual stacked parameters from the emissions releases and from that it calculates where the emissions would likely be deposited. The numbers in this are irrelevant because this is a coarse way to look at where the emissions may be deposited and it lines up with what we already know from the wind rose data. This will help guide and look for potential affected private wells.

Ms. Holman continued to say that testing is to be concluded in the next few weeks. They are still working on the review and approval of the modeling protocol. She said she does have one more follow-up item, the interstate chemicals clearing house. The question was asked about DEQ and the Department of Health and Human Services joining the chemicals clearing house. They found that the fees were based on population and the cost would have been about \$10,000. The focus is more on the commercial products and as they contemplated it they were focused on the chemicals in the environment, so they were able to get similar kinds of information that they needed through other sources such as U.S. EPA, the Environmental Council of States. Thus, they decided not to join. This concludes the presentation.

Chairman Davis asked if there were any questions about air quality. Representative Stone was recognized.

Representative Stone asked Ms. Holman what is discharged per year? Is it 500 pounds per year? And your background is in air?

Ms. Holman answered yes.

Representative Stone asked Ms. Holman from her years there, what is the worst air pollutant and what is the typical permitted volume for one of those pollutants?

Ms. Holman clarified with Representative Stone about what he was asking. She asked if he could be more specific on the area of concern. She said that it is case dependent and depends on the size of the property. In the air world, she said, they are looking at the concentration of the property boundary so if it's a small property, you can get concentrations above an accepted ambient level at the property boundary much easier than a 2,200 acre site. The modeling that has been done is more to understand the fate of the emissions. If they are contributing to the contamination in the wells, are they going far enough out so that it does not characterize air quality concern beyond the property boundary.

Representative Stone stated that he understood but it did not answer his question. He asked, in her experience in working for DEQ and Air Quality, what the worse contaminant that is a typical allowable permit discharge volume into the air, is it 500 pounds a year, is it 1000, 10,000-what would DEQ allow for discharge on an annual basis?

Ms. Holman said she was not trying to be difficult but it is very dependent upon the emissions from the facility, how close a community is, what the concentration would be at the property boundary so it's based typically on air quality modeling to characterize the concentrations and it varies.

Representative Stone then asked if it was common to have discharge air permits to have the contaminant levels measured in tons.

Ms. Holman said that for criteria pollutants, he is correct. For toxic pollutants, it tends to be in pounds; for example, benzene and mercury.

Representative Stone asked that this is not even a regular contaminant.

Ms. Holman answered that was correct. She wanted to emphasize that they are not trying to regulate air emissions at this juncture here, they are simply trying to understand whether these air emissions

played a role in contamination of the wells and if they are testing out far enough to capture any of the contaminated wells.

Representative Stone commented that he thinks it is a reasonable approach and would like to get more context about this going forward.

Representative Yarborough was recognized and asked how deep does a relatively inexpensive well have to be in this part of the state?

Ms. Holman said she thought a lot of these wells are in the 50 to 100 feet level range. She asked Michael Scott, Director, DWM, for the correct answer.

Mr. Scott said the majority of wells they are receiving data on are around 100 feet.

Chairman Davis recognized Representative Floyd.

He asked about the wind from his airport is southwest and the northeast.

Ms. Holman said they used data from the airport to predict what they thought the wind flows would look like at the facility so they are not using on-site facilities meteorological data, they are using the airport data to create that.

Representative Floyd then asked if it's coming from the south, it's then blowing west?

Ms. Holman responded that typical wind flows in that area, especially in the summer, would be from the southwest, across the plant property to the northeast of the property.

Representative Floyd said that given this is new for all of them and they are trying to have the best information and make the best decisions, he suggested to join the clearinghouse if \$10,000 will help everyone through a difficult time and have a better understanding.

Ms. Holman responded that she thinks they already get the majority of the data that they would receive through the clearinghouse. Much of the clearinghouse work is on commercial products which has not been the Agency's focus in regulating water quality, air quality, and the environment. There may be other reasons to join but it wouldn't necessarily help in this situation.

Representative Dixon was recognized to speak. He asked Ms. Holman about the 5,000 pounds she spoke of in her concluding statements. He asked if this was an estimate.

Ms. Holman responded that it was an estimate. He then asked her if she foresaw a point where air quality is concerned, the 17 staff, the allocation of resources, could that be reallocated somewhere else? Also, he questioned if we were at a point where we can say that the air quality or the deposition of harmful things that you can leave on and discount that?

Ms. Holman responded that she thinks they would like to see the results from the Stacked Test information and have a better understanding of the emissions and then figure out whether there's more work to do on the air side or not. Ms. Holman also said it would turn the estimates into more concrete estimates.

Representative Dixon commented that he was pleased with how the Department had conducted themselves during this situation. It is an impossible task trying to have everything filtered to the point when it gets to the public that it is out there in the proper context. The greater attempt they can make to put things in context and if they can get some help from the media on a regular and consistent basis moving from the sensational to the factual.

Chairman Davis asked if there were any more questions from the Committee. Representative Harrison was recognized.

She had a question about the Interstate Clearinghouse. She said that many states have more robust toxic contaminant programs than NC does and she wonders if we are able to access the kind of information they are sharing in terms of chemicals they have found to be of concern to their constituents.

Ms. Holman responded that most states are like NC where they make their assessments publicly available on their websites. Our agency does spend time working and talking with counterparts in other states.

Representative Harrison then asked where you find the contamination with the wells that are upstream? Is there speculation that it is coming from atmospheric deposits?

Ms. Holman responded that it was and that is what led them to the work in terms of looking into emissions and potential deposition patterns.

Chairman Davis asked Ms. Holman about the role of the monitors--how many on staff do this, who supervises them, who makes the decision of where they go, how many hours per week they work, what days do they work, what do they do when they work, what happens to the data they gather?

Ms. Holman said that she could speak broadly about it first. They have monitored staff in each of their seven regional offices. They typically have more than monitoring roles. They are also doing compliance inspections, complaint investigations, etc. She said they can provide the details of actual staff per regional office. Typically, their day to day work is managed by a regional supervisor in that regional office. In this situation, Linda Culpepper, Deputy Director, DWR, is providing more day to day direction especially if they are needing to take additional samples for this situation. There is also a broad ambient monitoring network that is done so there is routine monitoring at the sites. In addition, there is monitoring at the various industrial sites. She said they can provide a more detailed description.

Chairman Davis said that would be helpful to the Committee. He also asked what do they say when you say "I'm going to go monitor a river" and what happens to any data they may gather?

Ms. Holman said each monitoring method has its own special preparation; they go to the site, they take the sample, they bring that back. Previously, she had spoken about the chain of custody. A lot of times, that data is coming to the water sciences lab in Raleigh. It stays internal to the State but still the chain of custody is important. The monitoring is just a piece, though; they are going out to various facilities doing facility inspections. There is much in terms of field work investigations.

Chairman Davis commented if there was any information that Ms. Holman could provide the Committee to better understand what the staff does and also any information that would help with long term solutions. He asked if there were any other questions from the Committee. There were none and he thanked the presenters from DEQ for being there and appreciates all their responses to the Committee's concerns.

The next item on the agenda pertained to the schedule and plans for future committee meetings. Chairman Davis said, "Based upon the extensive presentations, information obtained, and discussions by this Committee to date, it is abundantly apparent that the pollution of our rivers, which is the source of our drinking water, is a very complex issue with no end in sight. This committee will be making a final report with recommended legislation to be considered during the 2018 Short Session, but in my opinion, we cannot wait until then and this Committee needs to move forward with recommended short-term solutions that the House can consider at the Special Legislative Session on January 10, 2018. Staff is presently working on possible legislation that this committee can consider. When completed, those recommendations will be forwarded to each committee member during December for your review and comment. During this time, if any committee member has any suggested short term solution that they would like to have addressed as potential legislation for discussion at our January Session, please submit to my office. The target date for the next meeting is January 4; not definite but proposed. A notice will be sent out when the date is confirmed. It will be a very important meeting because we will be voting and will want as many members as possible attending. In addition to the Committee discussion on January 4, I also plan to include a Public Comment portion whereby the Committee can receive input from the Committee concerning a proposed short term solution. The Committee will then vote and decide what legislation will be considered by the House during the January 10 Session. The Senate is being informed as to what the House is doing, so that hopefully after any legislation that is passed by the House will then go to the Senate for consideration during the January 10 Session. Thereafter, this committee will return to the task of determining more long term solutions to be considered during the 2018 Short Session. Depending on the legislation that is recommended by this committee, these will also be an appropriations request for any necessary funding to implement that particular long term solution. "

Representative Floyd asked about the January 4 meeting, if having public input, if there is some information that they want to use to bring forth in the report to the House, will there be time to add those suggestions?

Chairman Davis said his idea is that whatever the proposed legislation is, it might be a good idea to post it and the agenda on the website and let the public speak to that. Short term solutions will be the focus.

Representative Iler commented that it seemed plausible to have a meeting in the Cape Fear area, specifically in Wilmington to get public input.

Chairman Davis said he was not sure that would be practical because of the time frame. He will talk with staff.

Representative Harrison commented that yesterday that they had received two sets of comments from Citizens in the Cape Fear River Basin and a coalition environmental group. She wanted to make a request that it be a part of the record because she thought the Committee was going to be talking about legislative ideas today instead of the January 4 meeting.

Chairman Davis explained that he had looked at those and will look at them again with staff. He explained that he will only be hearing short term solutions for the time being.

Representative Floyd asked if the Chair will be limiting the amount of time the public can speak.

Chairman Davis said he will wait closer to the meeting and see how many they have. He agreed that a time limit is good but he also wants people to address different issues about this situation.

There were no further questions and no announcements. The meeting adjourned at 11:20am.

Respectfully submitted,

Representative Ted Davis, Jr., Chair

Judy Lowe, Committee Clerk